



Contact SAMSUNG WORLD-WIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
EIRE	0818 717 100	www.samsung.com/ie
U.K	0845 SAMSUNG(7267864)	www.samsung.com/uk



BN68-02353D-01



Plasma TV

user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at

www.samsung.com/register

Model _____ Serial No. _____



User Instructions

■ Screen Image retention

Do not display a still image (such as on a video game or when hooking up a PC to this PDP) on the plasma monitor panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

■ Height

The PDP can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height so do not install and operate there.

■ Heat on the top of the PDP TV

The top side of the product may be hot after long period of use as heat dissipates from the panel through the vent hole in the upper part of the product. This is normal and does not indicate any defect or operation failure of the product. However, children should be prevented from touching the upper part of the product.

■ The product is making a 'cracking' noise.

A 'cracking' noise may occur when the product contracts or expands due to a change of surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

■ Cell Defects

The PDP uses a panel consisting of 2,360,000(HD-level) to 6,221,000(FHD-level) pixels which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

■ Avoid operating the TV at temperatures below 5°C(41°F)

■ A still image displayed too long may cause permanent damage to the PDP Panel.



Watching the PDP TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and centre of the screen caused by the difference of light emission on the screen. Playing a DVD or a game console may cause similar effect to the screen. Damages caused by the above effect are not covered by the Warranty.

■ Afterimage on the Screen.

Displaying still images from Video games and PC for longer than a certain period of time may produce partial afterimages. To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images.

■ Warranty

- Warranty does not cover any damage caused by image retention.
- Burn-in is not covered by the warranty.

■ Installation

Be sure to contact an authorized service centre, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substance and where it operates continually such as the airport, the train station etc. Failure to do so may cause a serious damage to your set.




Digital TV Notice

- Functionalities related to Digital TV(DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you have access to a compatible DVB-C(MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.
- DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable. However, some differentiated features like EPG (Electric Program Guide), VOD (Video on Demand) and so on, are not included in this specification. So, they cannot be supported at this moment.
- Although this TV set meets the latest DVB-T and DVB-C standards[August,2008], the compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts cannot be guaranteed.
- Some cable-TV providers may charge an additional fee for such a service and you may be required to agree to terms and conditions of their business.
- Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with all providers.
- For more information, please contact your local Samsung customer care centre.

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Symbol

	Press
	Note
	One-Touch Button
	TOOLS

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Getting Started

5

English

Getting Started

Checking Parts



Owner's Instructions



Remote Control/
AAA Batteries (2ea)



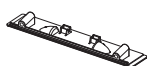
Power Cord



Cloth-Clean



Screw (4ea)



Cover-Bottom



Holder-Ring (4ea)



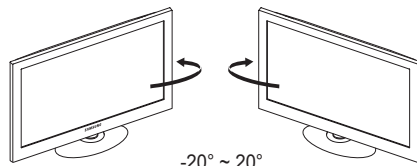
Ferrite Core for Power Cord
(1ea)

- The ferrite core is used to shield the cable from interference. When connecting a cable, open the ferrite core and clip it around the cable near the plug.



Using the Stand-Base

- Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always keep the PDP upright.
- The PDP can rotate 20 degrees in right and left directions.

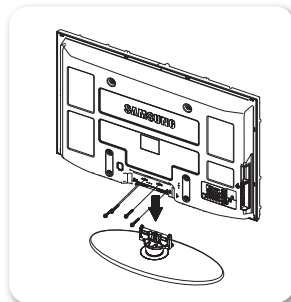


How to assemble the Stand-Base (depending on the model)

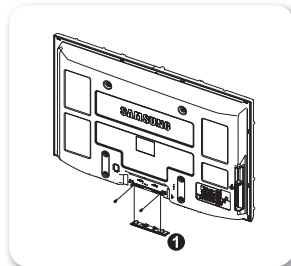
Using the 4 screws for securing the stand base and the monitor, firmly attach the monitor to the stand base. (The exterior of the set may be different than the picture.)



- Firmly secure the stand to the TV before moving it, as the stand may fall and could cause serious injury.
- Two or more people should carry the TV. Never lay the TV on the floor because of possible damage to the screen. Always store the TV upright.

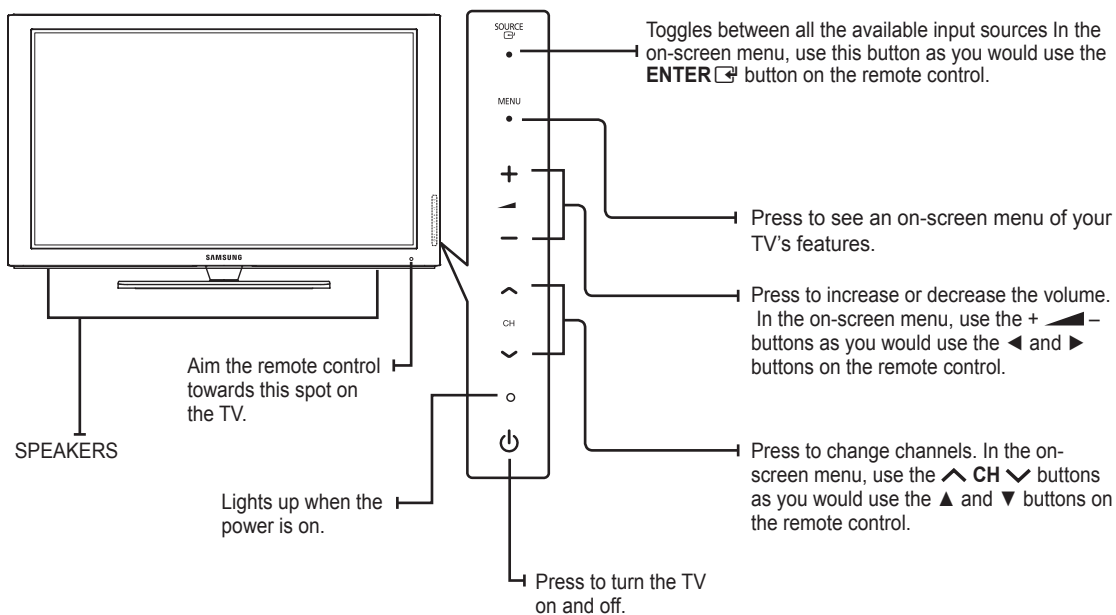


In case of installing your TV on the wall, close the cover ❶ on the stand-base connection part using two screws for hiding.

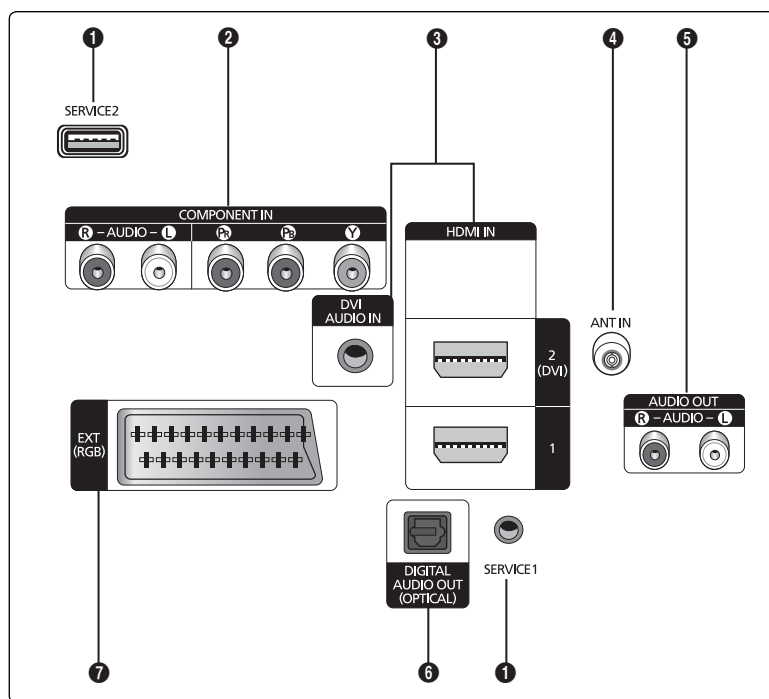


Viewing the Control Panel

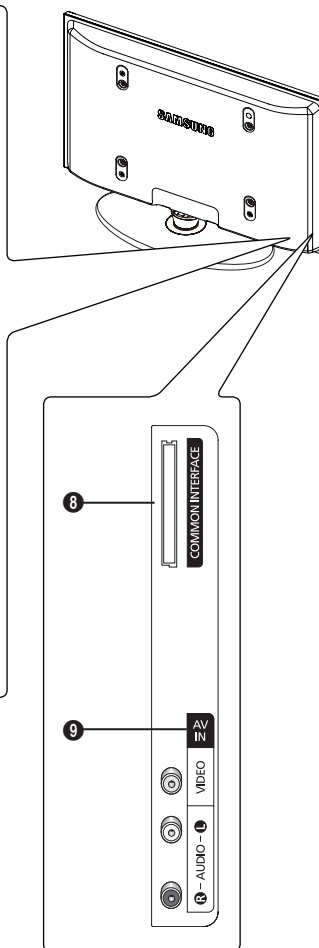
- The product colour and shape may vary depending on the model.
- Touch each button to operate.



Viewing the Connection Panel



TV Rear Panel



TV Side Panel

- The product colour and shape may vary depending on the model.
- Whenever you connect an audio or video system to your set, ensure that all elements are switched off.
- When connecting an external device, match the colour of the connection terminal to the cable.

① SERVICE1, 2

Connector for service.

② COMPONENT IN

Audio (AUDIO L/R) and video (Y / P_B / P_R) inputs for Component.

③ HDMI IN 1, 2(DVI)

No additional Audio connection is needed for an HDMI to HDMI connection.

- When using an HDMI/DVI cable connection, you must use the HDMI IN 2 (DVI) jack.

■ What is HDMI?

- **High Definition Multimedia interface** allows the transmission of high definition digital video data and multiple channels of digital audio.
- The HDMI/DVI terminal supports DVI connection to an extended device with the appropriate cable (not supplied). The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.

DVI AUDIO IN

DVI audio outputs for external devices.

4 ANT IN

75Ω Coaxial connector for Aerial/Cable Network.

- Supported modes for HDMI/DVI and Component

	480i	480p	576i	576p	720p	1080i	1080p
HDMI/DVI 50Hz	X	X	X	O	O	O	O
HDMI/DVI 60Hz	X	O	X	X	O	O	O
Component	O	O	O	O	O	O	O

5 AUDIO OUT(AUDIO R/L)

Connect RCA audio signals from the TV to an external source, such as Audio equipment.

6 DIGITAL AUDIO OUT (OPTICAL)

Connect to a Digital Audio Component.

7 EXT (RGB)

Inputs or outputs for external devices, such as VCR, DVD, video game device or video disc players.

- Input/Output Specification

Connector	Input			Output
	Video	Audio (L / R)	RGB	Video + Audio (L / R)
EXT	✓	✓	✓	Only TV or DTV output is available.

8 COMMON INTERFACE Slot

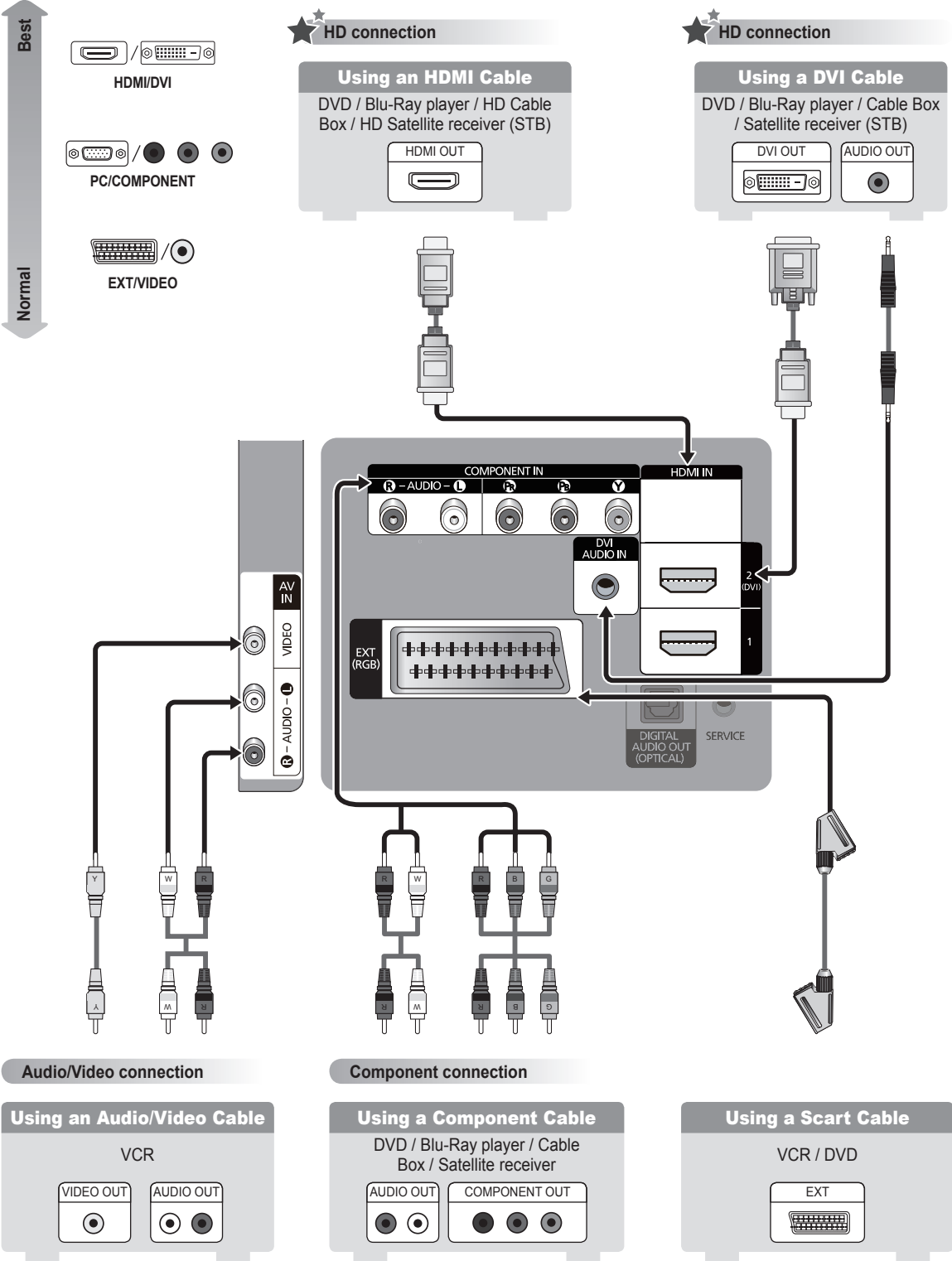
Insert CI (Common Interface) card into the slot.

- When not inserting **CI CARD** in some channels, **Scramble Signal** is displayed on the screen.
- The pairing information containing a telephone number, CI CARD ID, Host ID, and other information will be displayed in about 2~3 minutes. If an error message is displayed, please contact your service provider.
- When the channel information configuration has finished, the message **Updating Completed** is displayed, indicating that the channel list is now updated.
 - Insert the CI-Card in the direction marked on it.
 - CAM is not supported in some countries and regions, check with your authorized dealer.

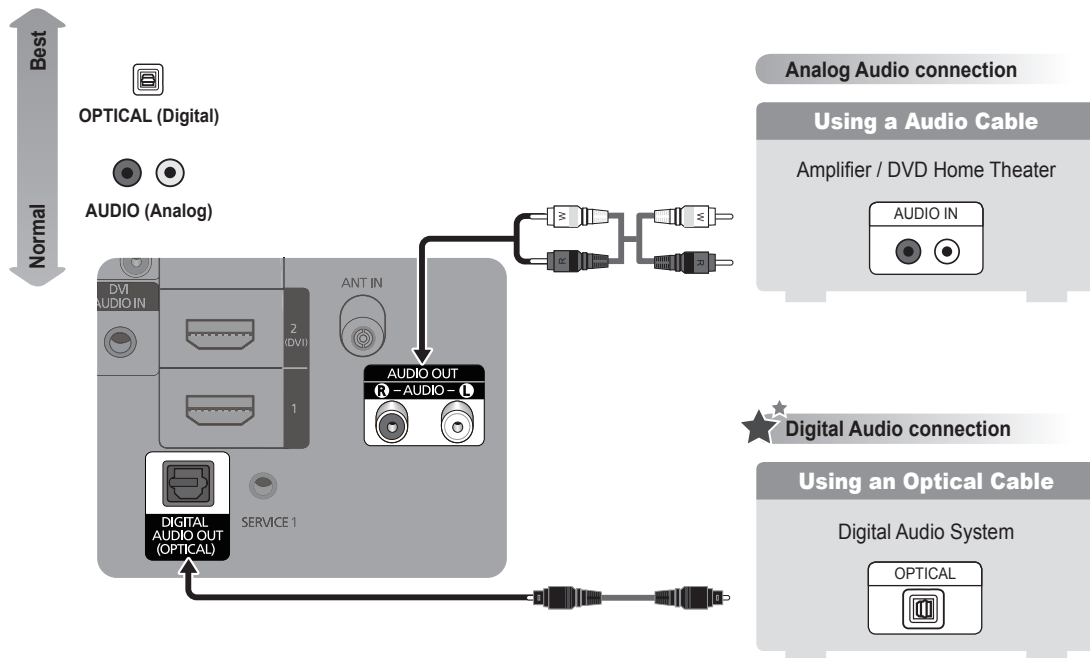
9 AV IN (VIDEO, AUDIO L/R)

Video and audio inputs for external devices, such as a camcorder or VCR.

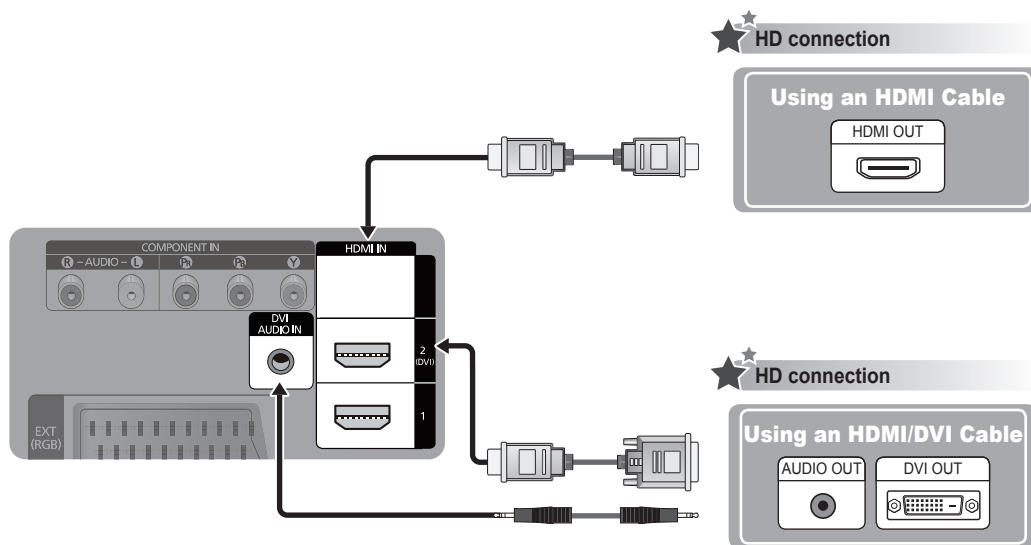
Connecting a AV device



Connecting an audio device



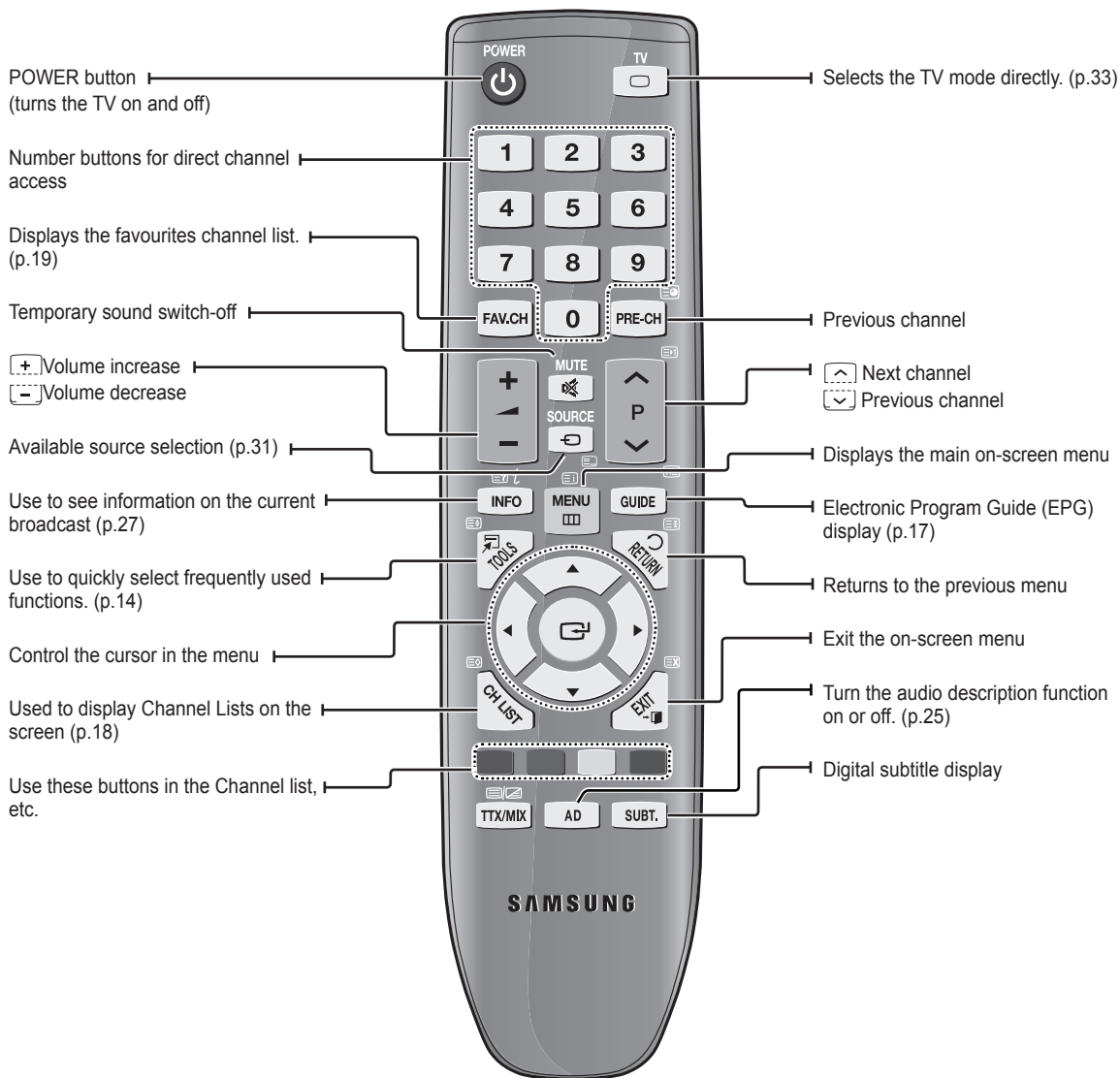
Connecting a PC



Remote Control

You can use the remote control up to a distance of about 23 feet from the TV.

- The performance of the remote control may be affected by bright light.

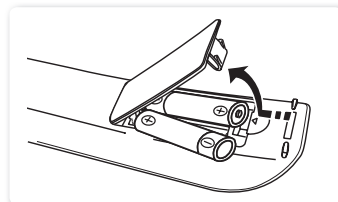


Teletext Functions (p.33)

	Teletext mode selection (LIST / FLOF)		Teletext reveal		Teletext previous page
	Teletext store		Exit from the Teletext display		Teletext index
	Teletext size		Teletext sub page		Teletext hold
	Fasttext topic selection		Teletext next page		Teletext previous page
	Teletext cancel		Teletext on / mix		

Installing Batteries in the Remote Control

- 1 Lift the cover at the back of the remote control upward as shown in the figure.
- 2 Install two AAA size batteries.
 - Make sure to match the '+' and '-' ends of the batteries with the diagram inside the compartment.
- 3 Replace the cover.
 - Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.
 - If the remote control doesn't work, check the following:
 - Is the TV power on?
 - Are the plus and minus ends of the batteries reversed?
 - Are the batteries drained?
 - Is there a power outage or is the power cord unplugged?
 - Is there a special fluorescent light or neon sign nearby?



Switching On and Off

The mains lead is attached to the rear of your set.

- 1 Plug the mains lead into an appropriate socket.
 - The standby indicator lights up on your set.
- 2 Press the **POWER** button on your set.
 - You also can press the **POWER** button or the **TV** button on the remote control to turn the TV on. The programme that you were watching last is reselected automatically.
- 3 Press the numeric button (0-9) or channel up / down (▲ / ▼) button on the remote control or **▲ CH ▼** button on your set.
 - When you switch the set on for the very first time, you will be asked to choose language in which the menus are to be displayed.
- 4 To switch your set off, press the **POWER** button again.

Placing Your Television in Standby Mode

Your set can be placed in standby mode in order to reduce the power consumption. The standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

- 1 Press the **POWER** button on the remote control.
 - The screen is turned off and a red standby indicator appears on your set.
- 2 To switch your set back on, simply press the **POWER** button, numeric buttons (0-9), **TV** button or channel up / down (▲ / ▼) button again.
 - Do not leave your set in standby mode for long periods of time (when you are away on holiday, for example). It is best to unplug the set from the mains and aerial.

Basic Operation

13

English

Basic Operation

Plug & Play Feature

When the TV is initially powered on, basic settings proceed automatically and subsequently.

- 1 Press the **POWER** button on the remote control. **You can set the menu language.** menu is automatically displayed. Select the appropriate language by pressing the ▲ or ▼ button.
Press the **ENTER** button to confirm your choice.
- 2 Press the ◀ or ▶ button to select **Store Demo** or **Home Use**, then the **ENTER** button.
 - We recommend setting the TV to **Home Use** mode for the best picture in your home environment.
 - **Store Demo** mode is only intended for use in retail environments.
 - If the unit is accidentally set to **Store Demo** mode and you want to return to Home Use (Standard): Press the Volume button on the TV. When the volume OSD is displayed, press and hold the **MENU** button on the TV for 5 seconds.
- 3 Press the **ENTER** button. Select the appropriate country by pressing the ▲ or ▼ button. Press the **ENTER** button to confirm your choice.
- 4 Press the ▲ or ▼ button to memorize the channels of the selected connection, then press the **ENTER** button.
 - **Air**: Air antenna signal.
 - **Cable**: Cable antenna signal.
- 5 Press the ▲ or ▼ button to select the channel source to memorize. Press the **ENTER** button to select Start.
 - **Digital & Analogue**: Digital and Analogue channels.
 - **Digital**: Digital channels.
 - **Analogue**: Analogue channels.
 - For more detailed description of selecting Cable mode, refer to page 15.
 - The channel search will start and end automatically.
 - After all the available channels are stored, the message **Set the Clock Mode** is displayed.
- 6 Press the **ENTER** button. Press the ▲ or ▼ button to select **Auto**, then Press the **ENTER** button.
 - If you select **Manual**, **Set current date and time** is displayed.
 - If you have received a digital signal, the time will be set automatically. If not, see page 27 to set the clock.
- 7 The brief instruction on **How to get the best performance from your new HDTV** is displayed. Press the **ENTER** button.
 - This menu is available **HD Connection Guide** in the **Support** menu.
- 8 The message **Enjoy your TV** is displayed. When you have finished, press the **ENTER** button.

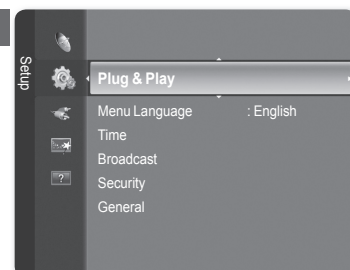


- The Screen Saver is activated if there is no remote control key input for longer than 1 minute while Plug & Play is running.
- The Screen Saver is activated if there is no operating signal for longer than 15 minutes.

- Press the **ENTER** button at any time to interrupt the memorization process.

If you want to reset this feature...

- 1 Press the **MENU** button to display the menu. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER** button.
- 2 Press the **ENTER** button again to select **Plug & Play**.
- 3 Enter your 4 digit PIN number.
 - The default PIN number of a new TV set is '0-0-0-0'.
 - If you want to change PIN number, refer to page 28.

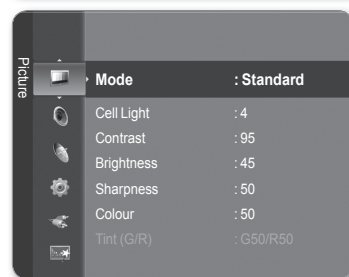


- The **Plug & Play** feature is only available in the **TV** mode.

Using the Menus

Viewing the Menus

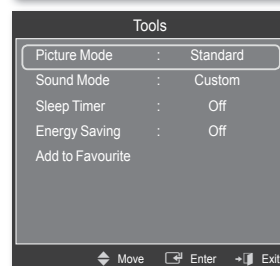
- 1 With the power on, press the **MENU** button. The main menu appears on the screen. The menu's left side has icons: **Picture**, **Sound**, **Channel**, **Setup**, **Input**, **Application**, **Support**.
- 2 Press the **▲** or **▼** button to select one of the icons. Then press the **ENTER** button to access the icon's sub-menu.
- 3 Press the **EXIT** button to exit.
 - The on-screen menu disappears from the screen after about one minute.



Using the TOOLS Button

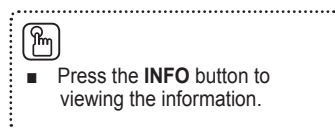
You can use the **TOOLS** button to select your frequently used functions quickly and easily. The **Tools** menu changes depending on which external input mode you are viewing.

- 1 Press the **TOOLS** button. The **Tools** menu will appear.
- 2 Press the **▲** or **▼** button to select a menu, then press the **ENTER** button.
- 3 Press the **▲** / **▼** / **◀** / **▶** / **ENTER** buttons to display, change, or use the selected items. For a more detailed description of each function, refer to the corresponding page.



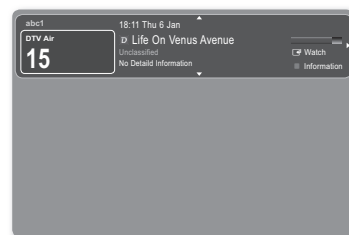
Viewing the Display

The display identifies the current channel and the status of certain audio-video settings.



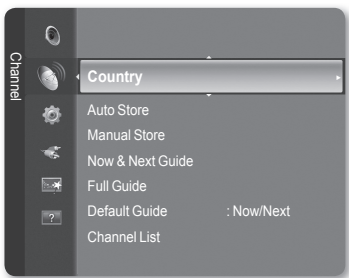
Press the **INFO** button on the remote control. The TV will display the channel, the type of sound, and the status of certain picture and sound settings.

- **▲**, **▼**: You can view other channel's information. If you want to move to the currently selected channel, press **ENTER** button.
- **◀**, **▶**: You can view the desired program's information at the current channel.
- Press the **INFO** button once more or wait approximately 10 seconds and the display disappears automatically.




Channel Menu

Channel	
Option	Description
Country	<ul style="list-style-type: none"> ■ Digital Channel You can change the country for digital channels. ■ Analogue Channel You can change the country for analogue channels. <ul style="list-style-type: none"> • The PIN number input screen appears. Enter your 4 digit PIN number.
Auto Store	<p>Scans for all channels with active broadcast stations (and availability depends on your country) and stores them in the TV's memory.</p> <p>You can memorize the channels of the selected connection.</p> <ul style="list-style-type: none"> ■ Air / Cable Antenna source to memorize <p>When selecting Cable,</p> <ul style="list-style-type: none"> • Search Mode → Quick <ul style="list-style-type: none"> – Network ID: Displays the network identification code. – Frequency: Displays the frequency for the channel. – Modulation: Displays available modulation values. – Symbol Rate: Displays available symbol rates. • Search Mode → Full / Network <ul style="list-style-type: none"> – Frequency (Start~Stop): Displays the frequency for the channel. – Modulation: Displays available modulation values. – Symbol Rate: Displays available symbol rates. <p>You can memorize the Channel source</p> <ul style="list-style-type: none"> • Digital & Analogue: Digital and Analogue channels. • Digital: Digital channels. • Analogue: Analogue channels.



- If you want to stop **Auto Store**, press the **ENTER** button. The **Stop Auto Store?** message will be displayed. Select **Yes** by pressing the ◀ or ▶ button, then press the **ENTER** button.
- If a channel is locked using the **Child Lock** function, the PIN input window appears.

Channel	
Option	Description
Manual Store	<p>Scans for a channel manually and stores it in the TV's memory.</p> <ul style="list-style-type: none"> ■ Digital Channel (Digital) Manual store for digital channels. <ul style="list-style-type: none"> • Channel: Set the Channel number using the ▲, ▼ or number (0~9) buttons. • Frequency: Set the frequency using the number buttons. • Bandwidth: Set the bandwidth using the ▲, ▼ or number (0~9) buttons. <p>When it has finished, channels are updated in the channel list.</p>
	<ul style="list-style-type: none"> ■ Analogue Channel Manual store for analogue channel. <ul style="list-style-type: none"> • Programme (Programme number to be assigned to a channel) Sets the programme number using the ▲, ▼ or number (0~9) buttons. • Colour System → Auto / PAL / SECAM / NTSC4.43 Sets the colour system value using the ▲ or ▼ button. • Sound System → BG / DK / I / L Sets the sound system value using the ▲ or ▼ button. • Channel (When you know the number of the channel to be stored) Press the ▲ or ▼ button to select C (Air channel) or S (Cable channel). Press the ► button, then press the ▲, ▼ or number (0~9) buttons to select the required number. <ul style="list-style-type: none"> – You can also select the channel number directly by pressing the number (0~9) buttons. – If there is abnormal sound or no sound, reselect the sound standard required. • Search (When you do not know the channel numbers): Press the ▲ or ▼ button to start the search. The tuner scans the frequency range until the first channel or the channel that you selected is received on the screen. • Store (When you store the channel and associated programme number): Set to OK by pressing the ENTER  button.



- If a channel is locked using the **Child Lock** function, the PIN input window appears
- **Digital Channel** is only available in DTV mode.



- **Analogue Channel** is only available in analogue TV mode.
- **Channel mode**
 - **C** (Air channel mode):
You can select a channel by entering the assigned number to each air broadcasting station in this mode.
 - **S** (Cable channel mode):
You can select a channel by entering the assigned number for each cable channel in this mode.

Channel	
Option	Description
Now & Next Guide / Full Guide / Default Guide	<p>The EPG (Electronic Programme Guide) information is provided by the broadcasters. Programme entries may appear blank or out of date as a result of the information broadcast on a given channel. The display will dynamically update as soon as new information becomes available.</p> <ul style="list-style-type: none"> ■ Now & Next Guide For the six channels indicated in the left-hand column, displays the Current programme and the Next programme information. ■ Full Guide Displays the programme information as time ordered One hour segments. One hours of programme information is displayed which may be scrolled forwards or backwards in time. ■ Default Guide → Now/Next / Full Guide You can decide whether to display either the Now/Next or the Full Guide when the GUIDE button on the remote control is pressed.



- You can also display the guide menu simply by pressing the **GUIDE** button.

Now & Next Guide

Now & Next Guide		
DTV Cable 900 f In	2:10 Tue 1 Jun	
Freshmen On Campus	2:00 - 2:30	No Detailed Information
900 f In		
Now		
900 f In	Freshmen O...	Street Hypn...
901 ITV Play	Mint Extra	No Information
902 Kerrang!	Loaded	No Information
903 Kiss	Fresh 40 with Dynamite MC	No Information
904 Oneed	Tell Delivery	No Information
903 Smash Hits!	Smash Hits! Sunday	
⏮ Watch ⏭ Information ⏪ Page ⏩ Full Guide ⏮ Exit		




















Full Guide

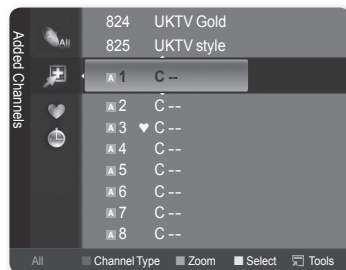
Full Guide		
DTV Cable 900 f In	2:10 Tue 1 Jun	
Freshmen On Campus	2:00 - 2:30	No Detailed Information
900 f In		
Today		
900 f In	Freshmen O...	Street Hypn...
901 ITV Play	Mint Extra	No Information
902 Kerrang!	Loaded	No Information
903 Kiss	Fresh 40 with Dynamite MC	No Information
904 Oneed	Tell Delivery	No Information
903 Smash Hits!	Smash Hits! Sunday	
⏮ Watch ⏭ Information ⏪ Page ⏩ Now/Next ⏮ Exit		

(Red)

▲ / ▼ / ◀ / ▶ ENTER	<p>Select a programme by pressing the ▲/▼/◀/▶/ENTER button.</p> <p>If the next programme is selected, it is scheduled with the clock icon displayed. If the ENTER button is pressed again, press the ▲/▼/◀/▶ button to select Cancel Schedules, the scheduling is canceled with the clock icon gone.</p> <p>For details about scheduling programmes, refer to the section.</p>
RED	Toggle between the Now/Next or Full Guide .
GREEN	Full Guide : Scroll backwards quickly (-24 hours).
YELLOW	Full Guide : Scroll forwards quickly (+24 hours).
BLUE	Exit the guide.
INFO	INFO button for the detailed information. Channel Number, Running Time, Status Bar, Parental Level, Video Quality Information (HD/SD), Sound Modes, Subtitle or Teletext, languages of Subtitle or Teletext and brief summary of the highlighted programme are included on the detailed information. "... " will be appeared if the summary is long.

Channel

Option	Description												
Channel List	<p>Using this menu, you can Add / Delete or set Favourite channels and use the programme guide for digital broadcasts.</p> <ul style="list-style-type: none"> ■ All Channels Shows all currently available channels. ■ Added Channels Shows all added channels. ■ Favourites Shows all favourite channels. ■ Programmed Shows all current reserved programmes. <p>Select a channel in the All Channels, Added Channels, Favourites, or Programmed screen by pressing the ▲ / ▼ buttons, and pressing the ENTER  button. Then you can watch the selected channel.</p> <ul style="list-style-type: none"> • Using the Colour buttons with the Channel List <ul style="list-style-type: none"> – Red (Channel Type): Toggle between your TV, Radio, Data/Other and All. – Green (Zoom): Enlarges or shrinks a channel number. – Yellow (Select): Selects multiple channel lists. • Channel Status Display Icons <table border="1"> <tbody> <tr> <td></td><td>An Analogue channel.</td></tr> <tr> <td></td><td>A channel set as a Favourite.</td></tr> <tr> <td></td><td>A locked channel.</td></tr> <tr> <td></td><td>A channel selected by pressing the</td></tr> <tr> <td></td><td>A programme currently being broadcast.</td></tr> <tr> <td></td><td>A reserved programme</td></tr> </tbody> </table> <p>Channel List Tools Menu (in All Channels / Added Channels / Favourites)</p> <ul style="list-style-type: none"> • Press the TOOLS button to use the Tools menu. • Tools menu items may differ depending on the channel status. ■ Add / Delete You can delete or add a channel to display the channels you want. <ul style="list-style-type: none"> • All deleted channels will be shown on All Channels menu. • You can also delete a channel to the Added Channels or Favourites menu in the same manner. 		An Analogue channel.		A channel set as a Favourite.		A locked channel.		A channel selected by pressing the		A programme currently being broadcast.		A reserved programme
	An Analogue channel.												
	A channel set as a Favourite.												
	A locked channel.												
	A channel selected by pressing the												
	A programme currently being broadcast.												
	A reserved programme												



- **TOOLS** (Tools): Displays the **Delete** (or **Add**), **Add to Favourite** (or **Delete from Favourite**), **Timer Viewing**, **Edit Channel Name**, **Edit Channel Number**, **Sort**, **Lock** (or **Unlock**), **Select All** (or **Deselect All**), or **Auto Store** menu.
(The Options menus may differ depending on the situation.)



- Press the **CH LIST** button on the remote control to bring up the channel lists.



- A gray-coloured channel indicates the channel has been deleted.
- The **Add** menu only appears for deleted channels.

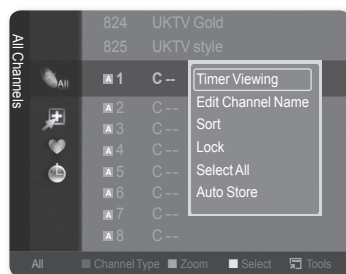
Channel	
Option	Description
Channel List	<ul style="list-style-type: none"> ■ Add to Favourite / Delete from Favourite You can set channels you watch frequently as favourites. <ul style="list-style-type: none"> • The "♥" symbol will be displayed and the channel will be set as a favourite. • All favourite channels will be shown on Favourite menu. ■ Timer Viewing If you reserve a programme you want to watch, the channel is automatically switched to the reserved channel in the Channel List; even when you are watching another channel. To reserve a programme set the current time first. <ul style="list-style-type: none"> • Only memorized channels can be reserved. • You can set the channel, month, day, year, hour and minute directly by pressing the number buttons on the remote control. • Reserving a programme will be shown on Programmed menu. ■ Digital Programme Guide and Viewing Reservation When a digital channel is selected, and you press the ► button, the Programme Guide for the channel appears. You can reserve a programme according to the procedures described above. ■ Edit Channel Name (only analogue channel) Channels can be labeled so that their call letters appear whenever the channel is selected. <ul style="list-style-type: none"> • The names of digital broadcasting channels are automatically assigned and cannot be labeled. ■ Edit Channel Number (only digital channel) You can also edit the channel number by pressing the number buttons on the remote control. ■ Sort (only analogue channel) This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store. ■ Lock / Unlock You can lock a channel so that the channel cannot be selected and viewed. This function is available only when the Child Lock is set to On. <ul style="list-style-type: none"> • The PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN, by selecting Change PIN from the menu. • The "🔒" symbol will be displayed and the channel will be locked.



- Press the **TOOLS** button to display **Tools** menu.
You can also add the favourite channel by selecting **Tools** → **Add to Favourite** (or **Delete from Favourite**).



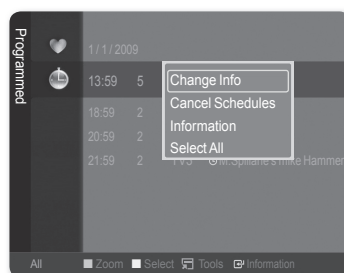
- To select the Favourite channels you have set up, press the **FAV.CH** button on the remote control.



Channel	
Option	Description
Channel List	<ul style="list-style-type: none"> ■ Select All / Deselect All • Select All: You can select all the channels in the channel list. • Deselect All: You can deselect all the selected channels in the channel list. – You can perform the add / delete, add to Favourites / delete from Favourites, or lock / unlock function for multiple channels at the same time. Select the required channels and press the yellow button to set all the selected channels at the same time. – The ✓ mark appears to the left of the selected channels. – You can only select Deselect All when there is a selected channel. ■ Auto Store • For further details on setting up options, refer to page 15. <p>Channel List Tools Menu (in Programmed)</p> <p>You can view, modify or delete a reservation.</p> <ul style="list-style-type: none"> • Press the TOOLS button to use the tools menu. ■ Change Info: Select to change a viewing reservation. ■ Cancel Schedules: Select to cancel a viewing reservation. ■ Information: Select to view a viewing reservation. (You can also change the reservation information.) ■ Select All / Deselect All: Select or deselect all reserved programmes
Channel Mode	<p>When the press the P ^/v button, Channels will be switched within the selected channel list.</p> <ul style="list-style-type: none"> ■ Added Ch. <p>Channels will be switched within the memorized channel list.</p> <ul style="list-style-type: none"> ■ Favourite Ch. <p>Channels will be switched within the favourite channel list.</p>
Fine Tune	<p>If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually.</p> <ul style="list-style-type: none"> • Fine tuned channels that have been saved are marked with an asterisk * on the right-hand side of the channel number in the channel banner. • If you do not store the fine-tuned channel in memory, adjustments are not saved. • To reset the fine-tuning, select Reset by pressing the ▼ button and then press the ENTER [↵] button.




- If a channel is locked using the **Child Lock** function, the PIN input window appears.



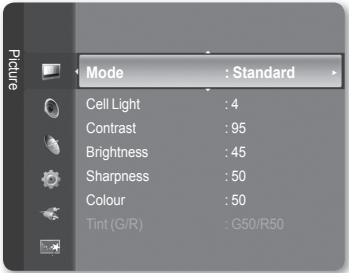
- Only Analogue TV channels can be fine tuned.

Picture Menu

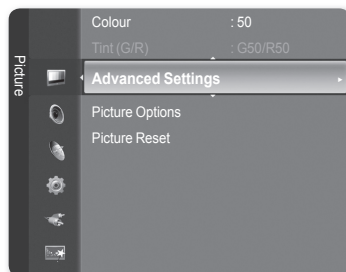
Picture	
Option	Description
Mode	<p>You can select the type of picture which best corresponds to your viewing requirements.</p> <ul style="list-style-type: none"> ■ Dynamic: Selects a high-definition picture for bright environments. ■ Standard: Selects the optimal picture display for normal environments. ■ Movie: Selects a comfortable picture display for dark environments.
Cell Light / Contrast / Brightness / Sharpness / Colour / Tint (G/R)	<p>Your television has several setting options that allow you to control the picture quality.</p> <ul style="list-style-type: none"> ■ Cell Light: Adjusts the pixel brightness. ■ Contrast: Adjusts the contrast level. ■ Brightness: Adjusts the brightness level. ■ Sharpness: Adjusts the sharpness. ■ Colour: Adjusts the colour saturation of the picture using the bar on the screen. ■ Tint (G/R): The closer to Red 100, the more saturated the red colour becomes. <ul style="list-style-type: none"> • Select a picture mode to be adjusted first. The adjusted values are saved for each picture mode. • When you make changes to Cell Light, Contrast, Brightness, Sharpness, Colour or Tint (G/R), the OSD will be adjusted accordingly. • In Analogue TV, Ext., AV modes of the PAL system, you cannot use the Tint Function. • Settings can be adjusted and stored for each external device you have connected to an input of the TV. • The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and then this will reduce the overall running cost.



■ Press the **TOOLS** button to display **Tools** menu. You can also set the picture mode by selecting **Tools** → **Picture Mode**.

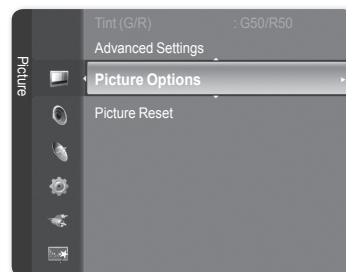


Picture	
Option	Description
Advanced Settings	<p>Samsung's new TVs allow you to make even more precise picture settings than previous models. See below to adjust detailed picture settings.</p> <ul style="list-style-type: none"> ■ Black Tone → Off / Dark / Darker / Darkest You can select the black level on the screen to adjust the screen depth. ■ Dynamic Contrast → Off / Low / Medium / High You can adjust the screen contrast so that the optimal contrast is provided. ■ Gamma You can adjust the primary colour (Red, Green, Blue) Intensity. ■ Colour Space Colour Space is a colour matrix composed of red, green and blue colours. Select your favourite Colour Space to experience the most natural colour. <ul style="list-style-type: none"> • Auto: Automatically sets the colour range depending on the input video source. • Native: Sets a colour range wider than that of the input video source. ■ White Balance You can adjust the colour temperature for more natural picture colours. <ul style="list-style-type: none"> • R-Offset / G-Offset / B-Offset / R-Gain / G-Gain / B-Gain: Changing the adjustment value will refresh the adjusted screen. • Reset: Resets the default white balance. ■ Flesh Tone You can emphasize the pink flesh tone in the picture. <ul style="list-style-type: none"> • Changing the adjustment value will refresh the adjusted screen. ■ Edge Enhancement → Off / On You can emphasize object boundaries in the picture.



- **Advanced Settings** is available in **Standard** or **Movie** mode.



Picture	
Option	Description
Picture Options	<ul style="list-style-type: none"> ■ Colour Tone → Cool / Normal / Warm1 / Warm2 You can select the most comfortable colour tone to your eyes. <ul style="list-style-type: none"> • The adjusted values are stored according to the selected Picture mode. • Warm1 or Warm2 is only activated when the picture mode is Movie. ■ Size You can select the picture size which best corresponds to your viewing requirements. <ul style="list-style-type: none"> • Auto Wide: Sets the picture in Auto Wide format. • 16:9: Sets the picture to the 16:9 aspect ratio. • Wide Zoom: Select this menu to view 4:3 aspect ratio pictures over a 16:9 aspect ratio TV by stretching the 4:3 picture vertically. • Zoom: Stretches the 16:9 aspect ratio picture vertically. • 4:3: Sets the picture to the 4:3 aspect ratio. • Screen Fit: Displays the full native HD signal that cannot be viewed using a normal TV. – Wide Zoom: Press the ► button to select Position, then press the ENTER button. – Press the ▲ or ▼ button to move the screen up / down. Then press the ENTER button. – Zoom: Press the ► button to select Position, then press the ENTER button. Press the ▲ or ▼ button to move the picture up and down. Then press the ENTER button. Press the ► button to select Size, then press the ENTER button. Press the ▲ or ▼ button to magnify or reduce the picture size in the vertical direction. Then press the ENTER button. – After selecting Screen Fit in HDMI (1080i / 1080p) or Component (1080i / 1080p) mode: Select Position by pressing the ◀ or ▶ button. Use the ▲, ▼, ◀ or ▶ button to move the picture. – Reset: Press the ◀ or ▶ button to select Reset, then press the ENTER button. You can initialize the setting. – If you use the Screen Fit function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function. ■ Screen Mode When setting the picture size to Auto Wide in a 16:9 wide TV, you can determine the picture size you want to see the 4:3 WSS (Wide Screen Service) image or nothing. Each individual European country requires different picture size so this function is intended for users to select it. <ul style="list-style-type: none"> • 16:9: Sets the picture to the 16:9 aspect ratio. • Wide Zoom: Select this menu to view 4:3 aspect ratio pictures over a 16:9 aspect ratio TV by stretching the 4:3 picture vertically. • Zoom: Stretches the 16:9 aspect ratio picture vertically. • 4:3: Selects the screen mode as 4:3. ■ Digital NR → Off / Low / Medium / High / Auto If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen. <ul style="list-style-type: none"> • When the signal is weak, select one of the other options until the best picture is displayed.



- The picture size options may vary depending on the input source.
- The items available may differ depending on the selected mode.
- Settings can be adjusted and stored for each external device you have connected to an input of the TV.
- Temporary image retention may occur when viewing a static image on the set for more than two hours.



- This function is available in **Auto Wide** mode.
- This function is not available in **Component** or **HDMI** mode.

Picture	
Option	Description
Picture Options	<ul style="list-style-type: none"> ■ HDMI Black Level → Normal / Low You can directly select the black level on the screen to adjust the screen depth. <ul style="list-style-type: none"> • This function is active only when the external input connects to HDMI (RGB signals). ■ Film Mode You can optimize the picture mode for watching movies. <ul style="list-style-type: none"> • Off : Basic video image processing applied and No auto-detection for film-based programs. • Auto: Automatically adjusts for the best image quality between film and video programs. ■ Screen Burn Protection Configures the Screen Burn Protection Options to prevent and reduce pixel burn. When an image remains in one position too long, it may cause a permanent burn on the screen. <ul style="list-style-type: none"> • Pixel Shift: To reduce the possibility of screen burn, this unit is equipped with screen burn prevention technology. This technology enables you to set picture movement up/down (Vertical) and side to side (Horizontal). The Time setting allows you to program the time between movement of the picture in minutes. <ul style="list-style-type: none"> – Set Pixel Shift to On by pressing the ▲ or ▼ button, then press the ENTER  button. – Select the required option by pressing the ▲ or ▼ button, then press the ENTER  button. – Available options: Horizontal, Vertical, Time.

Optimum condition for pixel shift

	Item	TV/Ext./AV/Component/ HDMI
Horizontal	0~4	2
Vertical	0~4	2
Time (minute)	1~4 min	3 min



- The Pixel Shift value may differ depending on the monitor size (inches) and mode.
- This function is not available in the **Screen Fit** mode

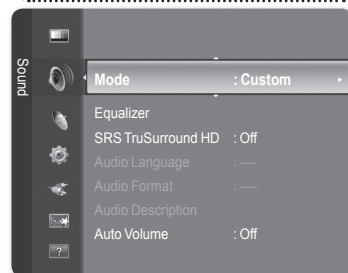
Picture Reset	<ul style="list-style-type: none"> • Scrolling: This function helps remove after images on the screen by moving all the pixels on the PDP according to a pattern. Use this function when there are remaining after images or symbols on the screen especially when you displayed a still image on the screen for a long time. • Side Grey: When you watch TV with the screen ratio of 4:3, the screen is prevented from any damage by adjusting the white balance on both extreme left and right sides. <ul style="list-style-type: none"> – Dark: When you set the screen ratio to 4:3, it darkens the left and right sides. – Light: When you set the screen ratio to 4:3, it brightens the left and right sides.
	<ul style="list-style-type: none"> ■ Reset Picture Mode / Cancel Resets all picture settings to the default values. <ul style="list-style-type: none"> • Select a picture mode to be reset. The reset is performed for each picture mode.

Sound Menu

Sound	
Option	Description
Mode	<ul style="list-style-type: none"> ■ Standard / Music / Movie / Clear Voice / Custom You can select the type of special sound effect to be used when watching a given broadcast.
Equalizer	<p>The sound settings can be adjusted to suit your personal preferences.</p> <ul style="list-style-type: none"> ■ Mode: You can select a sound mode to suit your personal preferences. ■ Balance: Controls the balance between the right and left speakers. ■ 100Hz / 300Hz / 1KHz / 3KHz / 10KHz (Bandwidth Adjustment): To adjust the level of different bandwidth frequencies ■ Reset: Resets the equalizer settings to the default values.
SRS TruSurround HD	<p>SRS TruSurround HD is the combined technology of TruSurround and FOCUS, TruBass.</p> <p>SRS TruSurround HD is down mixing technology that makes the Surround Sound effect of virtual 5.1 channel via two speakers. This function provide not only rich deep bass at a low-pitched sound but also improve the resolution at a high-pitched sound.</p> <ul style="list-style-type: none"> • If the sound is abnormal while TV is playing music, please adjust the equalizer and SRS TruSurround HD (Off/On).
Audio Language	<p>You can change the default value for audio languages. Displays the language information for the incoming stream.</p> <ul style="list-style-type: none"> ■ You can only select the language among the actual languages being broadcast.
Audio Format	<p>When sound is emitted from both the main speaker and the audio receiver, a sound echo may occur due to the decoding speed difference between the main speaker and the audio receiver. In this case, use the TV Speaker function.</p> <ul style="list-style-type: none"> • You can only select the language among the actual languages being broadcast.
Audio Description	<p>This is an auxiliary audio function that provides an additional audio track for visually challenged persons. This function handles the Audio Stream for the AD (Audio Description), when it is sent along with the Main audio from the broadcaster. Users can turn the Audio Description On or Off and control the volume.</p> <ul style="list-style-type: none"> ■ Audio Description→ Off / On Turn the audio description function on or off. ■ Volume You can adjust the audio description volume. • Volume is active when Audio Description is set to On.
Auto Volume	<p>Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.</p>



- Press the **TOOLS** button to display **Tools** menu. You can also configure the sound mode by selecting **Tools** → **Sound Mode**.



- **Audio Language, Audio Format**, and **Audio Description** is only available in DTV mode.



- You can select these options simply by pressing the **AD** button on the remote control.

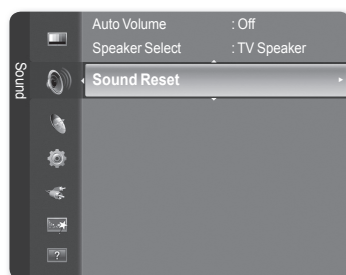
Sound

Option	Description
Speaker Select	<ul style="list-style-type: none"> ■ External Speaker / TV Speaker If you want to hear the sound through separate speakers, cancel the internal amplifier. <ul style="list-style-type: none"> • The – + MUTE buttons do not operate when the Speaker Select is set to External Speaker. • If you select External Speaker in the Speaker Select menu, the sound settings will be limited.

	TV's Internal Speakers	Audio Out (Optical, L / R Out) to Sound System
	TV / Ext. / AV / Component / PC / HDMI	TV / Ext. / AV / Component / HDMI
TV Speaker	Speaker Output	Sound Output
External Speaker	Mute	Sound Output
Video No Signal	Mute	Mute

Sound Reset

- **Reset All / Reset Sound Mode / Cancel**
You can restore the Sound settings to the factory defaults.

**Selecting the Sound Mode**

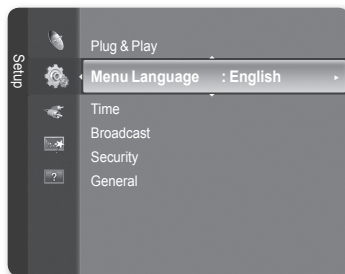
When you set to **Dual I II**, the current sound mode is displayed on the screen.

	Type of broadcast	On-screen indication		
NICAM Stereo	Regular broadcast (Standard audio)	Mono (Normal use)		
	Regular + NICAM Mono	NICAM	↔	Mono (Normal)
	NICAM-Stereo	NICAM Stereo	↔	zMono (Normal)
	NICAM Dual-I/II	NICAM Dual-1	→	NICAM Dual-2 → Mono (Normal)
A2 Stereo	Regular broadcast (Standard audio)	Mono (Normal use)		
	Bilingual or DUAL-I/II	Dual I	↔	Dual II
	Stereo	Stereo	↔	Mono (Forced mono)

- If the stereo signal is weak and an automatic switching occurs, then switch to the mono.
- This function is only activated in stereo sound signal. It is deactivated in mono sound signal.
- This function is only available in **TV** mode.

Setup Menu

Setup	
Option	Description
Menu Language	You can set the menu language.
Time	<ul style="list-style-type: none"> ■ Clock Setting the clock is necessary in order to use the various timer features of the TV. <ul style="list-style-type: none"> • Clock Mode You can set up the current time manually or automatically. <ul style="list-style-type: none"> – Auto: Set the current time automatically using the time from the digital broadcast. – Manual: Set the current time to a manually specified time. • Clock Set You can set the current time manually. <ul style="list-style-type: none"> – Set up this item when you have set Clock Mode to Manual. – You can set the Day, Month, Year, Hour, Minute directly by pressing the number buttons on the remote control. ■ Sleep Timer The sleep timer automatically shuts off the TV after a preset time. (30, 60, 90, 120, 150 and 180 minutes) <ul style="list-style-type: none"> • The TV automatically switches to standby mode when the timer reaches 0. • To cancel the Sleep Timer function, select Off. ■ Timer 1 / Timer 2 / Timer 3 Three different on / off timer settings can be made. <ul style="list-style-type: none"> • On Time: Set the hour, minute, am/pm, and Activate/ Inactivate. (To activate timer with the setting you've chosen, set to Activate.) • Off Time: Set the hour, minute, am/pm, and Activate/ Inactivate. (To activate timer with the setting you've chosen, set to Activate.) • Volume: Set the required volume level. • Antenna: You can select either DTV or ATV when the TV turns on automatically. • Channel: Select the desired channel. • Repeat: Select Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun, or Manual. <ul style="list-style-type: none"> – When Manual is selected, press the ► button to select the desired day of the week. Press the ENTER button over the desired day and the ✓ mark will appear. – You must set the clock first. – You can set the hour, minute and programme by pressing the number buttons on the remote control.



- If you disconnect the power cord, you have to set the clock again.



- The current time will appear every time you press the **INFO** button.



- Press the **TOOLS** button to display **Tools** menu. You can also set the sleep timer by selecting **Tools** → **Sleep Timer**.

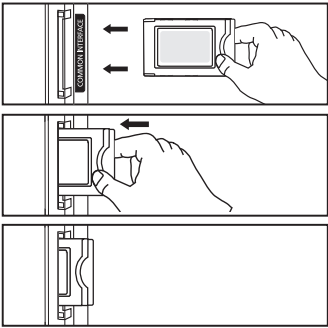






- **Auto Power Off**
When you set the timer On, the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.

Setup	
Option	Description
Broadcast	<ul style="list-style-type: none"> ■ Subtitle You can activate and deactivate the subtitles. Use this menu to set the Subtitle Mode. Normal under the menu is the basic subtitle and Hard of hearing is the subtitle for a hearing-impaired person. <ul style="list-style-type: none"> • Subtitle → Off / On: Switches subtitles off or on. • Mode → Normal / Hard of hearing: Sets the subtitle mode. • Subtitle Language: Set the subtitle language. – If the programme you are watching does not support the Hard of hearing function, Normal automatically activates even though Hard of hearing mode is selected. – English is the default in cases where the selected language is unavailable in the broadcast. ■ Digital Text → Disable / Enable If the programme is broadcast with digital text, this feature is enabled. <ul style="list-style-type: none"> • MHEG (Multimedia and Hypermedia Information Coding Experts Group) An International standard for data encoding systems used in multimedia and hypermedia. This is at a higher level than the MPEG system which includes data-linking hypermedia such as still images, character service, animation, graphic and video files as well as multimedia data. MHEG is user runtime interaction technology and is being applied to various fields including VOD (Video-On-Demand), ITV (Interactive TV), EC (Electronic Commerce), tele-education, tele-conferencing, digital libraries and network games. ■ Teletext Language You can set the Teletext language by selecting the language type. <ul style="list-style-type: none"> – English is the default in cases where the selected language is unavailable in the broadcast. ■ Preference <ul style="list-style-type: none"> • Primary Audio Language / Secondary Audio Language / Primary Subtitle Language / Secondary Subtitle Language / Primary Teletext Language / Secondary Teletext Language Using this feature, users can select one of the languages. The language selected here is the default when the user selects a channel. If you change the language setting, the Subtitle Language, Audio Language, and the Teletext Language of the Language menu are automatically changed to the selected language. The Subtitle Language, Audio Language, and the Teletext Language of the Language menu show a list of languages supported by the current channel and the selection is highlighted. If you change this language setting, the new selection is only valid for the current channel. The changed setting does not change the setting of the Primary Subtitle Language, Primary Audio Language, or the Primary Teletext Language of the Preference menu.



- You can select these options simply by pressing the **SUBT.** button on the remote control.


Setup	
Option	Description
Broadcast	<ul style="list-style-type: none"> ■ Common Interface <ul style="list-style-type: none"> • Installing the CI Card <ol style="list-style-type: none"> 1. Purchase the CI CAM module by visiting your nearest dealer or by phone. 2. Insert the CI CARD into the CAM in the direction of the arrow until it fits. 3. Insert the CAM with the CI CARD installed into the common interface slot. <ul style="list-style-type: none"> • Insert the CAM in the direction of the arrow, right up to the end so that it is parallel with the slot. 4. Check if you can see a picture on a scrambled signal channel. • CI Menu <p>This enables the user to select from the CAM-provided menu. Select the CI Menu based on the menu PC Card.</p> • Application Info. <p>This contains information on CAM inserted in the CI slot and displays it.</p> <p>The Application Info inserting is about the CI CARD. You can install the CAM anytime whether the TV is ON or OFF.</p> • CAM is not supported in some countries and regions, check with your authorized dealer.
	
Security	<ul style="list-style-type: none"> ■ Child Lock <p>This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by muting out video and audio.</p> <ul style="list-style-type: none"> • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting Change PIN from the menu. • You can lock some channels in Channel List. ■ Parental Lock <p>This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by a 4-digit PIN (Personal Identification Number) code that is defined by the user.</p> <ul style="list-style-type: none"> • The Parental Rating item differs depending on the country. • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting Change PIN from the menu. • When the parental ratings are set, the  symbol is displayed. • Allow All: Press to unlock all TV ratings. • Block All: Press to lock all TV ratings. ■ Change PIN <p>You can change your personal ID number that is required to set up the TV.</p> <ul style="list-style-type: none"> • Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number. • The default PIN number of a new TV set is '0-0-0-0'.
	<div style="border: 1px dashed black; padding: 5px;">  <ul style="list-style-type: none"> ■ Child Lock is available only in TV mode. </div>
	<div style="border: 1px dashed black; padding: 5px;">  <ul style="list-style-type: none"> ■ If you forget the PIN code, press the remote control buttons in the following sequence, which resets the PIN to '0-0-0-0': POWER (Off), , MUTE, 8, 2, 4, POWER (On). </div>

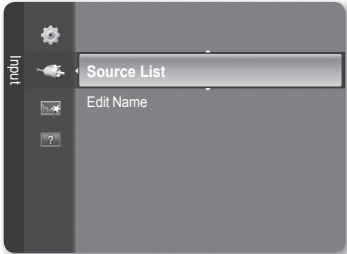
Setup	
Option	Description
General	<p>■ Game Mode</p> <p>When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game menu.</p> <p>When the Game Mode is On</p> <ul style="list-style-type: none"> • Picture Mode is automatically changed to Standard and users cannot change the mode. • Sound Mode is automatically changed to Custom and users cannot change the mode. Adjust the sound using the equalizer. • The Reset in the Sound menu is activated. Reset function initializes the Equalizer settings to the factory default setting. – Game Mode is not available in regular TV mode or Game Mode set to Off. – If the picture is poor when external device is connected to TV, check if Game Mode is On. – If you display the TV menu in Game mode, the screen shakes slightly. – The mark (🎮) appears on the screen which means that Game Mode is on with the selected source. – This function supports only game function. <p>■ Energy Saving → Off / Low / Medium / High / Picture Off</p> <p>This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the Energy Saving mode option to High to reduce eye fatigue as well as power consumption.</p> <p>If you select Picture Off, the screen is turned off and you can only hear the sound. Press any button to get out of Picture Off.</p> <ul style="list-style-type: none"> – In the Tools menu, Picture Off function is not supported. <p>■ Melody → Off / Low/ Medium / High</p> <p>The TV power on / off melody sound can be adjusted.</p> <ul style="list-style-type: none"> – The Melody does not play <ul style="list-style-type: none"> – When no sound is output from the TV because the 🔊 MUTE button has been pressed. – When no sound is output from the TV because the —🔊 (Volume) button has been pressed. – When the TV is turned off by Sleep Timer function.






- Press the **TOOLS** button to display **Tools** menu. You can also set the Energy Saving option by selecting **Tools → Energy Saving**.

Input Menu

Input	
Option	Description
Source List	<p>Use to select TV or other external input sources such as DVD players or Cable Box / Satellite receivers (Set-Top Box) connected to the TV. Use to select the input source of your choice.</p> <ul style="list-style-type: none">■ TV, Ext., AV, Component, HDMI1, HDMI2/DVI.• You can choose only those external devices that are connected to the TV. In the Source List, connected inputs will be highlighted and sorted to the top. Inputs that are not connected will be sorted to the bottom.• Using the Colour buttons on the remote with the Source list<ul style="list-style-type: none">–  TOOLS (Tools): Displays the Edit Name and Information menus.
Edit Name	<p>You can name the device connected to the input jacks to make your input source selection easier.</p> <ul style="list-style-type: none">■ VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA• When a PC with a resolution ofPS42B430: 640x480@60Hz, PS50B430: 1280x720@60 is connected to the HDMI IN 2 (DVI) port, you should set the HDMI2 / DVI mode to PC in the Edit Name of the Input mode.

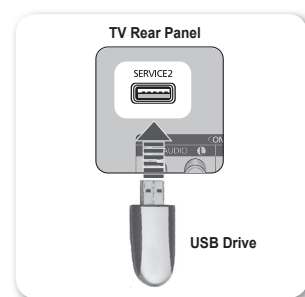




- Press the **SOURCE** button on the remote control to view an external signal source. TV mode can be selected by pressing the **TV** button, number buttons (**0~9**), and the **P**   button on the remote control.

Support menu

Support	
Option	Description
Self Diagnosis	<ul style="list-style-type: none"> ■ Picture Test, Sound Test, Signal Information If you think you have the Picture, Sound, Signal problem, perform the test. You can check the problem state. <ul style="list-style-type: none"> • If you hear no sound from the TV's speakers, before performing the sound test, make sure Speaker Select is set to TV speaker in the Sound menu. • The melody will be heard during the test even if Speaker Select is set to External Speaker or the sound is muted by pressing the MUTE button. • If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength. Continue to adjust the antenna until you find the best position with the strongest signal.
Software Upgrade	<p>To keep your product up-to-date with new Digital Television features then software upgrades are periodically broadcast as part of the normal Television signal. It will automatically detect these signals and display the software upgrade banner. You are given the option to install the upgrade.</p> <ul style="list-style-type: none"> ■ By USB Insert a USB drive containing the firmware upgrade into TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade. ■ By Channel Upgrades the software using the broadcasting signal. ■ Standby Mode Upgrade To continue software upgrade with master power on, Select On by pressing the ▲ or ▼ button. 45 minutes after entering standby mode, a manual upgrade is automatically conducted. Since the power of the unit is turned on internally, the screen may be on slightly for the product. This phenomenon may continue for more than 1 hour until the software upgrade is completed. ■ Alternative Software Replace the current software with the alternative.
HD Connection Guide	The brief instruction on How to get the best performance from your new HDTV is displayed. We offer the connection method for HD devices.
Contact Samsung	<p>You can know the Samsung Call center, website and information for product.</p> <ul style="list-style-type: none"> ■ You can move the previous or next page by pressing the ▲ or ▼ button.

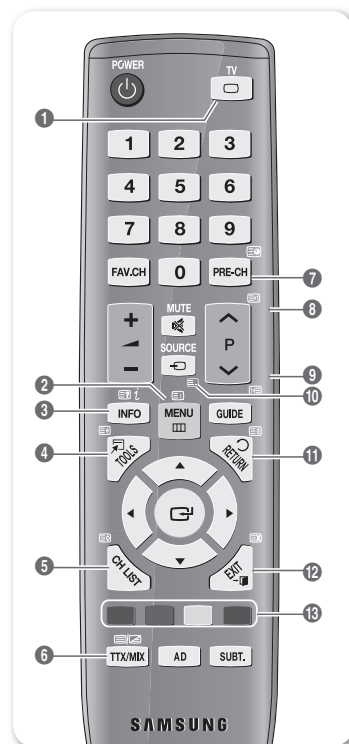


Teletext Feature

Most television stations provide written information services via Teletext. The index page of the Teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.

- For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

- (exit)**
Exit from the teletext display.
- (index)**
Used to display the index (contents) page at any time while you are viewing teletext.
- (reveal)**
Used to display the hidden text (answers to quiz games, for example). To display normal screen, press it again.
- (size)**
Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.
- (store)**
Used to store the teletext pages.
- (teletext on/mix)**
Press to activate teletext mode after selecting the channel providing the teletext service. Press it twice to overlap the teletext with the current broadcasting screen.
- (sub-page)**
Used to display the available sub-page.
- (page up)**
Used to display the next teletext page.
- (page down)**
Used to display the previous teletext page.
- (mode)**
Press to select the teletext mode (LIST/FLOF). If you press it in the LIST mode, it switches into the List save mode. In the List save mode, you can save teletext page into list using the (store) button.
- (hold)**
Used to hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again.
- (cancel)**
Used to display the broadcast when searching for a page.
- Colour buttons (red/green/yellow/blue)**
If the FASTEXT system is used by a broadcasting company, the different topics covered on a teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

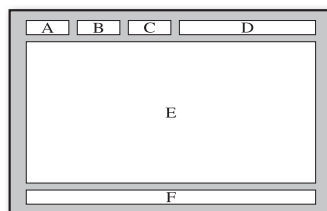


- You can change teletext pages by pressing the numeric buttons on the remote control.

The Teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information.
	FASTEXT information.

- Teletext information is often divided between several pages displayed in sequence, which can be accessed by:
 - Entering the page number
 - Selecting a title in a list
 - Selecting a coloured heading (FASTEXT system)



- Press the TV button to exit from the teletext display.

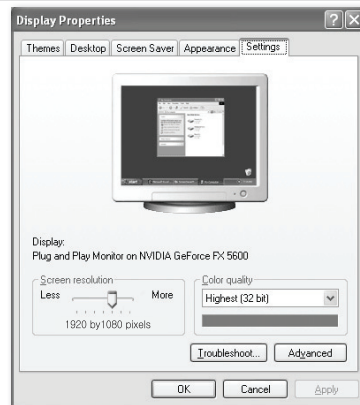
PC Display

Setting Up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. The actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. However, even if your actual screens look different, the same basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

- 1 First, click on 'Control Panel' on the Windows start menu.
- 2 When the control panel window appears, click on 'Appearance and Themes' and a display dialog-box will appear.
- 3 When the control panel window appears, click on 'Display' and a display dialog-box will appear.
- 4 Navigate to the 'Settings' tab on the display dialog-box. The correct size setting (resolution)
 - Optimum
 - PS42B430 : 1024x768 pixels
 - PS50B430 : 1360x768 pixels

If a vertical-frequency option exists on your display settings dialog box, the correct value is '60' or '60 Hz'. Otherwise, just click 'OK' and exit the dialog box.



Display Modes

Both screen position and size will vary depending on the type of PC monitor and its resolution. The resolutions in the table are recommended.

HDMI/DVI Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)	PS42B430	PS50B430
IBM	640 x 350	31.469	70.086	25.175	+ / -	✓	✓
	720 x 400	31.469	70.087	28.322	- / +	✓	✓
MAC	640 x 480	35.000	66.667	30.240	- / -	✓	✓
	832 x 624	49.726	74.551	57.284	- / -	✓	✓
VESA DMT	640 x 480	31.469	59.940	25.175	- / -	✓	✓
		37.861	72.809	31.500	- / -	✓	✓
		37.500	75.000	31.500	- / -	✓	✓
	800 x 600	37.879	60.317	40.000	+ / +	✓	✓
		48.077	72.188	50.000	+ / +	✓	✓
		46.875	75.000	49.500	+ / +	✓	✓
	1024 x 768	48.363	60.004	65.000	- / -	✓	✓
		56.476	70.069	75.000	- / -	✓	✓
		60.023	75.029	78.750	+ / +	✓	✓
	1360 x 768	47.712	60.015	85.500	+ / +		✓
VESA CVT	720 x 576	35.910	59.950	32.750	- / +	✓	✓
	1280 x 720	44.772	59.855	74.500	- / +		✓
		56.456	74.777	95.750	- / +		✓
VESA GTF	1280 x 720	52.500	70.000	89.040	- / +		✓

- When using an HDMI/DVI cable connection, you must use the **HDMI IN 2 (DVI)** jack.
- The interlace mode is not supported.
- The set might operate abnormally if a non-standard video format is selected.

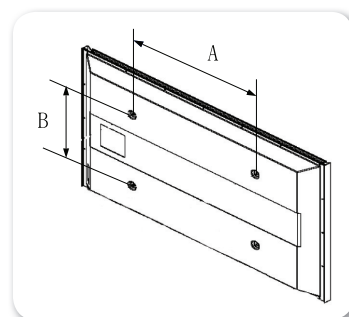
Wall Mount Kit Specifications (VESA)

Install your wall mount on a solid wall perpendicular to the floor.

When attaching to other building materials, please contact your nearest dealer.

If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

Product Family	inch	VESA Spec. (A * B)	Standard Screw	Quantity
LCD-TV	19"~22"	100 * 100	M4	4
	23"~29"	200 * 100		
	30"~40"	200 * 200	M6	
	46"~55"	400 * 400	M8	
	57"~70"	800 * 400		
	80" ~	1400 * 800		
PDP-TV	42"~ 50"	400 * 400	M8	4
	58"~ 63"	600 * 400		
	70" ~	800 * 400		
	80" ~	1400 * 800		



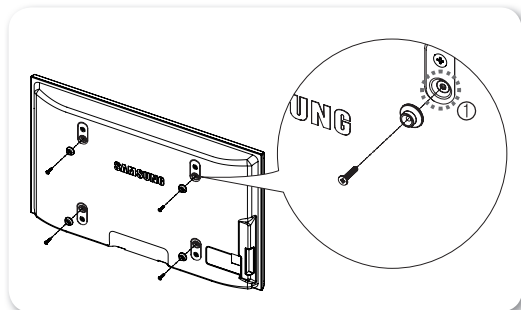
- We provided the standard dimensions for wall mount kits as shown in the table above.
- When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
- Do not use screws longer than the standard dimension, as they may cause damage to the inside of the TV set.
- For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
- Do not use screws that do not comply with the VESA standard screw specifications.
- Do not use fasten the screws too strongly, this may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
- Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
- Our 57" and 63" models do not comply with VESA Specifications. Therefore, you should use our dedicated wall mount kit for this model.
- Do not exceed 15 degrees tilt when mounting this TV.



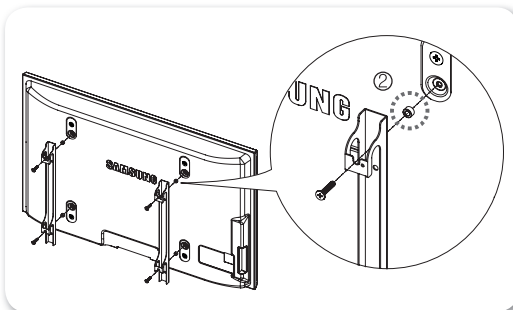
Do not install your Wall Mount Kit while your TV is turned on.
It may result in personal injury due to electric shock.

Preparing before installing Wall- Mount on the wall

Case A. Installing SAMSUNG Wall-Mount



Case B. Installing other company's Wall-Mount



- 1** Install Wall Mount with the torque range of 15kgf-cm or less. Make sure that parts can be damaged if the torque is out of the specified range.
- 2** Accessory Kit contains Holder-Ring [2] for installing other company's Wall-Mount on Samsung TV. (Case B)
 - screw down the hole [1] when installing wall-mount on the wall.

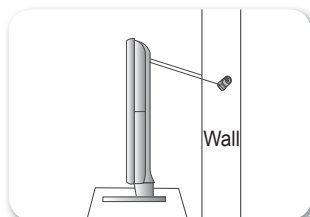
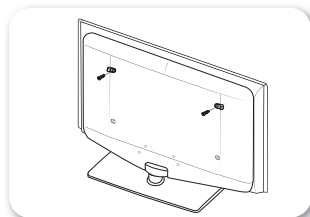
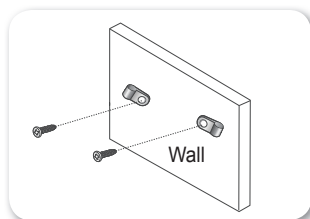
Securing the TV to the Wall



Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.

To avoid the TV from falling

- 1** Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
 - You may need additional material such as an anchor depending on the type of wall.
 - Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
- 2** Remove the screws from the center back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
 - Screws may not be supplied with the product.
- 3** Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.
 - Install the TV near to the wall so that it does not fall backwards.
 - It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
 - Untie the string before moving the TV.
- 4** Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections, contact a professional installer.



Troubleshooting

Before contacting the Samsung after-sales service, perform the following simple checks.

If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

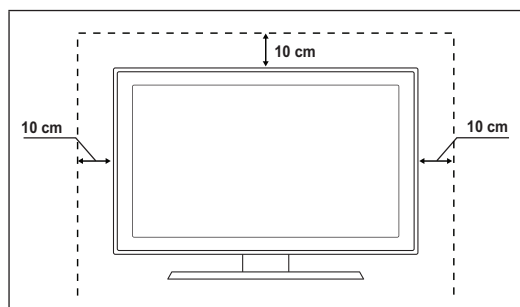
No sound or picture	<ul style="list-style-type: none"> Check that the mains lead has been connected to a wall socket. Check that you have pressed the button on your set. Check the picture contrast and brightness settings. Check the volume. Check if Speaker Select is set to External Speaker.
Normal picture but no sound	<ul style="list-style-type: none"> Check the volume. Check whether the MUTE button has been pressed on the remote control.
No picture or black and white picture	<ul style="list-style-type: none"> Adjust the colour settings. Check that the broadcast system selected is correct.
Sound and picture interference	<ul style="list-style-type: none"> Try to identify the electrical appliance that is affecting the television, then move it further away. Plug the television into a different main socket.
Blurred or snowy picture, distorted sound	<ul style="list-style-type: none"> Check the direction, location and connections of your aerial. This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	<ul style="list-style-type: none"> Replace the remote control batteries. Clean the upper edge of the remote control (transmission window). Check that the + and – ends of the batteries are inserted correctly. Check that the batteries are drained.
Screen is black and power indicator light blinks steadily	<ul style="list-style-type: none"> On your computer check; Power, Signal Cable. Move the computer's mouse or press any key on the keyboard. On your equipment check (STB, DVD, etc) ; Power, Signal Cable. The TV is using its power management system. Press the Source button on the panel or remote control. Turn the TV off and on.
The damaged picture appears in the corner of the screen.	<ul style="list-style-type: none"> If Screen Fit is selected in some external devices, the damaged picture may appear in the corner of the screen. This symptom is caused by external devices, not TV.
The "Resets all settings to the default values" message appears.	<ul style="list-style-type: none"> This appears when you press and hold the EXIT button for a while. The product settings are reset to the factory defaults.

Securing the Installation Space

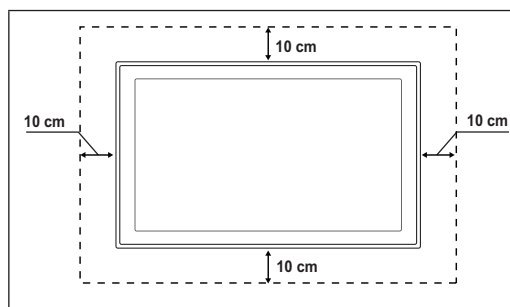
Keep the required distances between the product and other objects (e.g. walls) to ensure proper ventilation. Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product. Install the product so the required distances shown in the figure are kept.

- When using a stand or wall-mount, use parts provided by Samsung Electronics only.
- If you use parts provided by another manufacturer, it may result in a problem with the product or an injury due to the product falling.
- If you use parts provided by another manufacturer, it may result in a problem with the product or fire due to an increase in the internal temperature of the product due to poor ventilation.
- The appearance may differ depending on the product.

When installing the product with a stand



When installing the product with a wall-mount



Specifications

The descriptions and characteristics in this booklet are given for information purposes only and are subject to modification without notice.

Model Name	PS42B430	PS50B430
Screen Size (Diagonal)	42 inch	50 inch
PC Resolution (Optimum)	1024 x 768 @ 60 Hz	1360 x 768 @ 60 Hz
Sound (Output)	10 W x 2	10 W x 2
Dimension (WxHxD)		
Body	1055 x 667 x 73 mm	1230 x 756 x 73 mm
With stand	1055 x 729 x 316 mm	1230 x 817 x 316 mm
Weight		
Body	24 kg	32 kg
With stand	28 kg	36 kg
Environmental Considerations		
Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)	
Operating Humidity	10% to 80%, non-condensing	
Storage Temperature	-4 °F to 113 °F (-20 °C to 45 °C)	
Storage Humidity	5% to 95%, non-condensing	

- This device is a Class B digital apparatus.
- Design and specifications are subject to change without prior notice.
- For the power supply and Power Consumption, refer to the label attached to the product.
- When using an HDMI/DVI cable connection, you must use the HDMI IN 2(DVI) terminal.

Warning! Important Safety Instructions

Please read the appropriate section that corresponds to the marking on your Samsung product before attempting to install the product.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.



This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.



This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
 - Do not cover the slots and openings with a cloth or other materials.
 - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
 - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.
 - Give your product 10 cm (4 inch) clearance from the wall.
- Do not place this apparatus near or over a radiator or heat resistor, or where it is exposed to direct sunlight.
- Do not place heat generating items such as candles, ashtrays, incense, flammable gas or explosive materials near the product.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water (near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately. Make sure to pull out the power cord from the outlet before cleaning.
- This apparatus uses batteries. In your community there might be regulations that require you to dispose of these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plug end, adaptors and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.

This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply.
- Never insert anything metallic into the open parts of this apparatus. Doing so may create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet. Do not touch the power cord with wet hands.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it
 - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
 - Accumulated dust can cause an electric shock, an electric leakage or a fire by causing the power cord to generate sparks and heat or the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substances and where it operates for 24 hours such as the airport, the train station etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
 - An improper ground may cause electric shock or equipment damage. (Class I Equipment only.)
- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- Do not allow children to hang onto the product.
- Store the accessories (battery, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky shelf, a slanted floor or a location exposed to vibration.
- Do not drop or impart any shock to the product. If the product is damaged, disconnect the power cord and contact a service center.



WARNING - TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.

Wiring the Mains Power Supply Plug (UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BS11362 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitably approved extension lead or consult your dealer for assistance. However, if there is no alternative but to cut off the plug, remove the fuse and then safely dispose of the plug.

Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE - NEUTRAL BROWN - LIVE

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows :

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK.

The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING:

DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL (⊕), OR COLOURED GREEN OR GREEN AND YELLOW.

Warranty Card



UNITED KINGDOM

This Samsung product is warranted for a period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer from whom it was purchased. However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will comply with the warranty on the terms issued to purchasers in the country concerned. In case of difficulty, details of our Authorised Service Centres are available from:

Samsung Electronics U.K. Ltd.

Customer Care Centre

PO Box 17243

Edinburgh, EH11 4YB

United Kingdom

Tel: 0870 SAMSUNG (7267864)(UK & Northern Ireland)

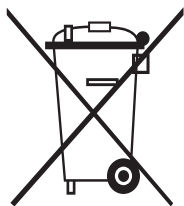
Tel: 0818 717 100 (EIRE Only)

Fax: +44 0845 650 8080

Web : www.samsung.com

WARRANTY CONDITIONS

1. The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.
2. Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.
3. Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres.
No re-imbursement will be made for repairs carried out by non Samsung Dealers and, any such repair work and damage to the products caused by such repair work will not be covered by this warranty.
4. This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any Country other than the one for which the product was originally designed and manufactured.



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.